

AMENDMENTS

Please amend the above-identified application as follows:

In The Claims:

Please cancel claim 6 and 18, without prejudice.

Please amend the claims as follows:

1. (Four Times Amended) An electronic fever thermometer comprising:
- a temperature sensor;
- an electronic circuit coupled to the temperature sensor to process temperature data measured by the temperature sensor;
- a display element coupled to the electronic circuit to display a temperature corresponding to the temperature data measured by the temperature sensor; and
- a housing formed by an injection molding die, the housing including a main part formed as a single monolithic unit made of a transparent material enclosing the electronic circuit, the housing having:
- a first surface area constituting a display window and consisting of the transparent material in an untreated state that renders the display element to be visible through the housing, and
- a second surface area treated by a roughening process that imparts an opaque finish to the transparent material and that renders at least a portion of the electronic circuit enclosed within the housing to be substantially non-viewable relative to the

display window, the roughening process involving chemical etching of a surface of the injection molding die.

[a display window consisting of the transparent material in an untreated state, and configured to allow viewing of the display therethrough, the housing further having an inner surface and an outer surface, wherein a substantial portion of at least one of the inner and outer surfaces is treated through a roughening process that renders the substantial portion to be essentially non-transparent and thereby render the electronic circuit enclosed within the housing to be non-viewable relative to the display element.]

6. (Cancelled) An electronic fever thermometer according to Claim 1, wherein at least one of the outer surface and inner surface is produced in an injection molding die, a surface of the injection molding die being roughened by at least one of a mechanical and chemical treatment by exposure to at least one of a blasting abrasive, etching and grinding.

10. (Amended) An electronic fever thermometer according to Claim 3, wherein the main part and the cover part are made from polycarbonate [by injection molding].

17. (Three Times Amended) An electronic [fever] thermometer comprising:

a temperature sensor;

an electronic circuit coupled to the temperature sensor to process a temperature measured by the temperature sensor;

a display element coupled to the electronic circuit for displaying the temperature measured by the temperature sensor; and

a housing made from a transparent material formed by an injection molding process using a die, for housing the temperature sensor, the electronic circuit, and the display element, [wherein] the housing having:

a substantially transparent viewing portion positioned to allow viewing of the display element, and

a light diffusing portion configured to be rougher in texture and substantially less transparent than the viewing portion so that light passing through the light diffusing portion is diffusely scattered, the light diffusing portion positioned to render at least a portion of the electronic circuit housed within the housing to be substantially non-viewable relative to the viewing portion, the light diffusion portion formed by a chemically-etched surface of the die.

[includes a substantially transparent viewing portion, the light diffusing portion having an integrally molded textured surface formed thereon, whereby the light diffusing portion is rougher in texture and substantially less transparent than the viewing portion so that light passing through the light diffusing portion is diffusely scattered, the display element being positioned within the housing adjacent the viewing surface to be visible therethrough, and the electronic circuit being positioned within the housing to be rendered substantially non-visible relative to the display element.]

18. (Cancelled) An electronic fever thermometer according to Claim 6 wherein the inner surface is roughened by an etching process, and the outer surface is left in an untreated smooth state.

19. (Once Amended) An electronic [fever] thermometer according to Claim 17 wherein the housing comprises an outer surface and an inner surface, and wherein a portion of the inner surface exclusive of the viewing portion is roughened [by an etching process] to produce the light diffusing portion, and the outer surface is left untreated to appear smooth relative to the roughened portion of the inner surface.

Please add new claims 20-24 as follows:

20. (New) An electronic fever thermometer according to Claim 1, wherein the second surface area comprises a roughened area on an inner surface of the housing.

21. (New) An electronic fever thermometer according to Claim 1, wherein the second surface area comprises a roughened area on an outer surface of the housing.

22. (New) An electronic thermometer according to Claim 17 wherein the housing comprises an outer surface and an inner surface, and wherein a portion of the outer surface exclusive of the viewing portion is roughened to produce the light diffusing portion, and the inner surface is left untreated to appear smooth relative to the roughened portion of the outer surface.

23. (New) An electronic fever thermometer comprising:
a temperature sensor;

an electronic circuit coupled to the temperature sensor to process temperature data measured by the temperature sensor;

a display element coupled to the electronic circuit to display a temperature corresponding to the temperature data measured by the temperature sensor; and

a housing formed by an injection molding die, the housing including a main part formed as a single monolithic unit made of a transparent material enclosing the electronic circuit, the housing having:

a first surface area constituting a display window and consisting of the transparent material in an untreated state that renders the display element to be visible through the housing, and

a second surface area treated by a roughening process that imparts an opaque finish to the transparent material and that renders at least a portion of the electronic circuit enclosed within the housing to be substantially non-viewable relative to the display window, the roughening process involving mechanical etching of a surface of the injection molding die.

24. (New) The electronic fever thermometer of claim 23 wherein the roughening process comprises grinding the surface of the injection molding die used to form the housing.

REMARKS

By this amendment, claims 1, 10, 17, and 19 have been amended, claims 6 and 18 have been cancelled, and new claims 20-24 have been added. Hence, claims 1-5, 7-10, 17, and 19-24 are currently pending in the application.

Claim Rejections Under 35 U.S.C. § 103(a)

2. Claims 1-3, 6, 10, 17 are finally rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 07027626 (hereinafter "JP") in view of Mock et al. 4037470 (hereinafter "Mock").

In response to the instant rejection, independent claims 1 and 17 have been amended to claim an electronic thermometer comprising a housing made of a transparent material formed by an injection molding die with a first surface area consisting of the transparent material in an untreated state and a second surface area consisting of the transparent material in an opaque or light diffusing state created by a roughening process caused by chemically etching the die used in the injection molding.

It is respectfully submitted that the cited combination of JP and Mock does not teach or suggest the formation of a second surface area of a housing for an electronic thermometer that is substantially opaque relative to a first surface area, and which is formed by chemically etching a surface of a die used in an injection molding process. As stated in the Office Action, "JP does not disclose an inner or outer surface [of the housing] to be made opaque by roughening." (Office Action, 12/26/02, page 2). Although Mock describes roughening the entire surface of a spherical casing for measuring high energy laser beam power, Mock does not teach roughening a

surface to block light in one area while transmitting light in a second area. Furthermore, Mock does not teach or suggest the creation of a roughened surface by chemically etching a die used in an injection molding process used to create a housing. Mock only states that the interior surface of an already opaque (copper) spherical casing can be “roughened by grit-blasting [or] blackened by surface treatment.” (Mock, Col. 4, lines 40-41). Such a surface treatment of the entire surface of a metal sphere is significantly different from the roughening process claimed in amended claims 1 and 17, in which a substantially opaque second surface area is formed by chemically etching a die used in injection molding a housing from a transparent material.

Claim 6 stands rejected as a “product by process” that has been given no patentable weight since it has been held that 1) the determination of patentability in “product by process” claim is based on the product itself, even though such claims are limited and defined by the process, and 2) the product in a “product by process” claim is unpatentable if it is the same as, or obvious from a product of the prior art, even if the prior art product was made by a different process. By this amendment, claim 6 has been cancelled. Therefore, the instant rejection of claim 6 has been rendered moot.

Claims 2-5 and 7-10, and new claims 19-22 either depend from amended claim 1 or amended claim 17. Therefore, for the reasons provided above with respect to claims 1 and 17, it is respectfully submitted that these claims are patentable over the references and combinations cited in the Office Action.

New claims 23 and 24 claim an electronic fever thermometer comprising a housing made of a transparent material formed by an injection molding die with a first surface area consisting of the transparent material in an untreated state and a second surface area consisting of the


transparent material in an opaque or light diffusing state created by a roughening process caused by mechanically etching the die used in the injection molding. Although Mock may suggest the roughening of an inner surface a sphere by mechanical means, such as grit-blasting, neither Mock nor any of the other cited references teaches or suggests a roughening process that creates a relatively opaque surface area through mechanically etching a die used in injection molding a housing made of transparent material. Instead, Mock describes the direct grit-blasting of a copper spherical housing to create a reflective surface. Therefore, applicant respectfully submits that new claims 23 and 24 are patentable over the cited references.

It is respectfully submitted support for the claim amendments and new claims is present in the specification, drawings, and claims of the application as originally filed, and that in view of the amendments and remarks set forth herein, the applicable rejections have been overcome.

If there are any additional charges, please charge them to our Deposit Account
Number 04-0822.

Respectfully submitted,
DERGOSITS & NOAH LLP

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